

## CLAIMS

I claim:

1. A system for continuous printing, the system comprising:
  - an unwind storing a roll of print media;
  - a cutter which receives the print media from said unwind and which cuts the print media into sheets of variable length;
  - a sheet printer which receives the sheets of print media from said cutter, prints a design on each of the sheets and outputs printed-on sheets;
  - an edge sensor which detects a leading edge of each of the printed-on sheets when output from said sheet printer;
  - a rewind which receives the printed-on sheets output from said sheet printer; and
  - a controller which receives an output signal from said edge sensor indicating the detection of the leading edge and, based upon the output signal, synchronizes said rewind and the received printed-on sheets to cause a trailing edge and the leading edge of each successive printed-on sheet received by said rewind to be butted one to the other on the rewind.
2. The system according to claim 1, further including a sheet binder interposed between said sheet printer and said rewind, wherein said sheet binder attaches the successive printed-on sheets one to the other.
3. The system according to claim 1, further including a media coater interposed between said sheet printer and said rewind for coating the print-on sheets.
4. The system according to claim 1, wherein said sheet printer is an electrophotographic printer.
5. The system according to claim 1, wherein said sheet printer is capable of printing on sheets at least as long as about 47 inches.
6. A system for continuous printing, the system comprising:
  - an unwind storing a roll of print media;
  - a cutter which receives the print media from said unwind and which cuts the print media into sheets;

a sheet printer which receives the sheets of print media from said cutter, prints a design on each of the sheets and outputs printed-on sheets; and

a controller which receives an output signal from said printer and, based upon the output signal, synchronizes said unwind, said cutter and said sheet printer to provide a substantially continuous flow of print media from said unwind to said sheet printer.

7. The system according to claim 6, wherein said sheet printer is an electrophotographic printer.

8. The system according to claim 6, wherein said sheet printer is capable of printing on sheets at least as long as about 47 inches.

9. A system for continuous printing, the system comprising:

a sheet printer which receives sheets of print media and outputs printed-on sheets of the print media;

an edge sensor which senses a leading edge of each of the printed-on sheets when output from said printer;

a rewind which receives the printed-on sheets output from said printer; and

a controller which receives an output signal from said edge sensor indicating the detection of the leading edge and synchronizes, based upon the output signal, said sheet printer and said rewind to cause a trailing edge and the leading edge of each successive printed-on sheet received by said rewind to be butted one to the other on the rewind.

10. The system according to claim 9, further including a sheet binder interposed between said sheet printer and said rewind, wherein said sheet binder attaches the successive sheets one upon the other.

11. The system according to claim 9, wherein said sheet printer is an electrophotographic printer.

12. The system according to claim 9, further including a cutter which forms the sheets of print media by cutting one of roll, fan-fold or card stock media.

13. The system according to claim 9, wherein said sheet printer is capable of printing on sheets at least as long as about 47 inches.

14. A method of continuous printing comprising the steps of:

feeding sheets of print media to a sheet printer;  
printing a design on each of the sheets and outputting printed-on sheets; and  
feeding each of the printed-on sheets to a rewind for storage thereon, wherein said sheet printer and said rewind are synchronized such that leading and trailing edges of successive printed-on sheets received by said rewind are butted one to the other so as to form a roll of print media on the rewind.

15. The method of continuous printing according to claim 14, further including the steps of:

unwinding a roll of the print media from an unwind; and  
cutting the print media with a cutter into the sheets of print media for feeding to the sheet printer.

16. The method of claim 14, further including the step of feeding the printed-on sheets from said sheet printer to a sheet binder prior to feeding the printed-on sheets to the rewind, wherein said sheet binder attaches the successive printed-on sheets one to the other for storing on the rewind.

17. The method of claim 14, further including the step of cutting one of roll, fan-fold or card stock media to form the sheets of print media.